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10/519,161	02/01/2005	Guglielmo Biagiotti	6456/PCT	5281
6858	7590	10/17/2007	EXAMINER	
BREINER & BREINER, L.L.C.			MUSSEY, BARBARA J	
P.O. BOX 320160			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22320-0160			1791	
			MAIL DATE	DELIVERY MODE
			10/17/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/519,161

**Applicant(s)**

BIAGIOTTI, GUGLIELMO

**Examiner**

Barbara J. Musser

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/23/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 16, 17, and 21-23 rejected under 35 U.S.C. 102(b) as being anticipated by Gambini(EP 1074382A1).

Gambini discloses an embossing and laminating device having a first embossing roll with pattern(17), a second embossing roll with a pattern(18), first and second pressure rolls(14,15) cooperating with first and second embossing rolls, wherein the embossing rolls can be removable from the supporting structure on an interchangeable roll assembly.(Figure 3) While the reference does not explicitly show the supporting structure, the glue roll must be mounted on something and the walls to which the rolls are attached.

Regarding claim 2, the embossing rolls are carried by an interchangeable assembly while the pressure rolls are attached to a fixed support(13, the walls).

Regarding claim 3, Gambini discloses the pressure rolls are moved toward or away from the embossing rolls via actuators.(Col. 3, ll. 20-22)

Regarding claim 16, the pressure rolls are supported on a pair of arms(16) which oscillate about an axis(13) fixed relative to the supporting structure.

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Regarding claim 17, since the pressure rolls are movable, they can adopt more than one position.

Regarding claim 21, Gambini discloses the embossing rolls can have different patterns.(Col. 1, ll. 32-35)

Regarding claim 22, Gambini discloses the interchangeable roll assembly can be moved toward or away from the supporting structure.(Figure 3)

Regarding claim 23, Gambini discloses a gluing unit(19) which on the art would understand was attached to some sort of support.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gambini.

Gambini does not disclose the specific relationship of the embossments on the embossing rolls relative to one another. However, the use of embossments that are in phase wherein the rolls are tip-to-tip or nested are extremely well-known and conventional in the embossing arts and would have been obvious since they are so well-known and conventional in the embossing arts.

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Regarding claim 20, while Gambini does not disclose clamping the interchangeable assembly on the supporting structure, one in the art would appreciate that to prevent the interchangeable roll assembly from moving in use, it would need to be attached to the supporting structure in some manner.

5. Claims 8, 9, 11, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gambini as applied to claim 1 above, and further in view of Biagiotti(U.S. Patent 6,245,414).

The reference cited above does not describe the drive mechanism for the embossing rolls. Biagiotti discloses embossing rolls can be driven by either gears attached to the rolls or by a belt drive.(Col. 7, ll. 61-63; Col. 8, ll. 25-26) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use either gears on the embossing rolls or a belt drive to drive the embossing rolls of Gambini since Biagiotti shows these are known methods of driving embossing rolls.(Col. 7, ll. 61-63; Col. 8, ll. 25-26)

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gambini and Biagiotti as applied to claim 9 above, and further in view of Matsuo et al.(U.S. Patent 5,078,000).

The references cited above do not disclose the gears being immersed in oil. Matsuo et al. discloses it is known to immerse gear trains in oil for roll pairs.(Col. 4, ll. 5-10) It would have been obvious to one of ordinary skill in the art at the time the invention was made to immerse gears of Gambini and Biagiotti in oil since Matsuo et al.

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discloses it is known to immerse gears in oil and since this aids lubrication of the gears.(Col. 4, ll. 5-10)

7. Claims 1, 4-7, 13, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leakey et al.(U.S. Patent 6,109,326) in view of Kanda(U.S. Patent 4,629,526).

Leakey et al. discloses an embossing device having first and second embossing rolls(94,95) and first and second pressure rolls cooperating with the embossing rolls(92,93).(Figure 6) The reference does not disclose the embossing rolls are located on an interchangeable assembly. Kanda discloses a device for forming a corrugated web wherein the corrugating rolls are located on an interchangeable assembly.(Figure 2) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the embossing rolls of Leakey et al. located on an interchangeable assembly since this can reduce downtime of the device.(Col. 1, ll. 43-67)

Regarding claims 4-6, Leakey et al. discloses the embossments are either nested or tip-to-tip.(Abstract)

Regarding claim 7, Leakey et al. discloses a laminating roll.(104) which cooperates with one of the embossing rolls.

Regarding claim 13, Kanda discloses the non-patterned rolls are located on a supporting structure with substantially vertical sides(10) with the axis of the first embossing roll located within a slot(formed by the C-shaped supporting structure).

Regarding claim 15, Kanda discloses the gluing unit is attached to the supporting structure.(Figure 2)

8. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leakey et al. and Kanda as applied to claim 1 above, and further in view of Hirakawa et al.(U.S. Patent 4,631,109).

The references cited above do not disclose one of the embossing rolls being movable relative to the interchangeable assembly it is attached to. Hirakawa et al. discloses one patterned roll being movable relative to the other patterned roll via an arm attached to a axis.(Figure 3, 20) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make one of the embossing rolls movable on the interchangeable assembly relative to the other via an arm attached to an axis as suggested by Hirakawa et al. since this would allow the rolls to be moved apart so that they could be replaced.

Regarding claim 19, one in the art would appreciate that when in use, i.e. when mounted, the embossing rolls should be pressed against one another.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

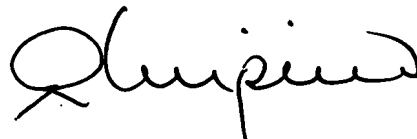
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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